

TREES AND SHRUBS


PRACTICE IMPLEMENTATION AND MAINTENANCE



Natural Resources Conservation Service

Maryland

Field Offices



Allegany	301-777-1494
Anne Arundel	410-571-6757
Baltimore	410-666-1188
Calvert	410-535-1521
Caroline	410-479-1202
Carroll	410-848-6696
Cecil	410-398-4411
Charles	301-934-9588
Dorchester	410-228-5640
Frederick	301-695-2803
Garrett	301-334-6950
Harford	410-838-6181
Howard	410-465-3180
Kent	410-778-5353
Montgomery	301-590-2855
Prince George's	301-574-5162
Queen Anne's	410-758-1380
Somerset	410-651-0370
St. Mary's	301-475-8402
Talbot	410-822-1344
Washington	301-797-6820
Wicomico	410-546-4777
Worcester	410-632-5439

Trees and shrubs may be established to reduce soil erosion and sedimentation, improve water quality, produce commercial timber, provide wildlife habitat, and beautify an area. Trees and shrubs native to Maryland should be planted whenever feasible, because they are usually best adapted to this area. ("Native" refers to species which were living within a region at the time of European settlement.) Lists of native trees and shrubs can be found in the Conservation Practice Standards for Conservation Cover (327) and Wetland Restoration (657), as well as other technical references.

PRE-PLANTING

HERBICIDE CARRYOVER can pose a threat to new plantings. Tree and shrub seedlings are particularly sensitive to herbicide carryover. Herbicides such as Basagran, Blazer, Classic, Poast, Plateau and Roundup have low persistence and generally do not pose a risk for carryover. Herbicides such as Atrazine, Preview, Canopy, Lorox Plus, Command, Scepter and Treflan have medium to high persistence and can pose a risk of carryover. The persistence of herbicides is directly affected by factors such as soil pH and moisture. To assess risks prior to planting, contact the herbicide manufacturer for specific information on persistence.

WEED CONTROL is essential prior to planting. Noxious weeds must be controlled at all times according to Maryland State Law. Contact the Maryland Department of Agriculture Weed Control Section at 410-841-5871 for more information on noxious weeds.

If the trees and shrubs are going to be planted into existing vegetation (including set-aside):

- The fall prior to planting, mow or brush hog the field or planting strips. If desired, you can treat the field or planting strips with an herbicide such as Roundup at this time.
- In early spring, the field or planting strips should be mowed or treated with an herbicide.
- For non-chemical weed control, till the field or planting strips in the fall. If necessary, seed the companion planting mix listed in the Planting Plan to control erosion.

If the trees and shrubs are going to be planted into a clean, relatively weed-free area, such as cropland that was planted during the last growing season:

- If erosion is a concern, the companion planting mix must be used. Seed at the higher rate in the fall prior to planting or in the spring in conjunction with the planting.

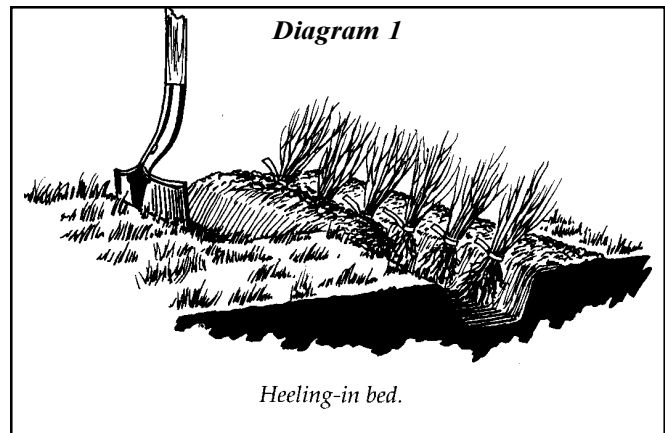
- If erosion is not a concern, the companion planting mix can be seeded at the lower rate to suppress weeds.

PLANTING YEAR

BARE-ROOT SEEDLINGS must be properly handled and stored to ensure a successful planting. When the seedlings arrive, open the nursery bales and check the plants for heating, molding, or dryness. If they are satisfactory, store them in a cool, shady place with roots protected, and plant within a few days.

If the seedlings cannot be planted immediately, dig a trench about a foot deep and bury the seedling roots in soil. This is called “heeling-in” (see Diagram 1). Pack the soil firmly, water thoroughly, and make certain all roots are covered. The seedlings may be stored in a cooler as long as the plants are still dormant.

Evergreens require extreme care. When heeling-in evergreens, split the small bundles and spread out the seedlings in a trench to make sure the root system of each seedling is protected by soil.

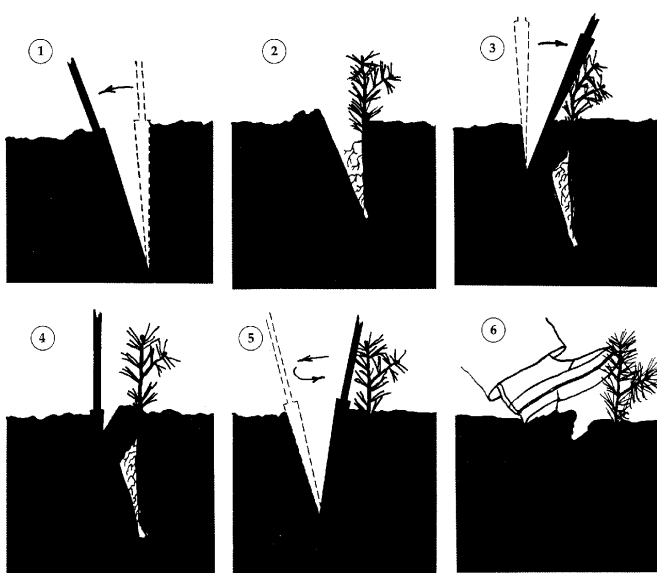


Bare-root seedlings can be machine or hand planted. See Diagram 2 for hand planting information.

CONTAINERIZED PLANTS can be stored for extended periods if they are protected. Store the plants in partial to full shade and water frequently. Containerized seedlings can be planted by machine or by hand. Larger containerized stock must be hand planted (see Diagram 3) and should only be used when cost-effective.

Bare-root seedlings are best planted in early

**Diagram 2 - HAND PLANTING PROCEDURE
WITH DIBBLE**



1. Insert the dibble straight down into the soil to the full depth of the blade and pull back on the handle to open the planting hole. (DO NOT rock the dibble back and forth as this causes soil in the planting hole to be compacted, inhibiting root growth.)
2. Remove the dibble and push the seedling roots deep into the planting hole. Pull the seedling back up to the correct planting depth (the root collar should be 1 to 3 inches below the soil surface). Gently shake the seedling to allow the roots to straighten out. DO NOT twist or spin the seedling or leave the roots J-rooted.
3. Insert the dibble several inches in front of the seedling and push the blade halfway into the soil. Twist and push the handle forward to close the top of the slit to hold the seedling in place.
4. Push the dibble down to the full depth of the blade.
5. Pull back on the handle to close the bottom of the planting hole. Then push forward to close the top, eliminating air pockets around the root.
6. Remove the dibble and close and firm up the opening with your heel. BE CAREFUL to avoid damaging the seedling.

spring. Large containerized stock can be planted in the fall or spring.

After planting, control weeds by mowing or treating with a herbicide. Mowing should be done with extreme caution to avoid mowing the seedlings. Vegetation between rows can be left for wildlife food and cover.

Herbicides can be spot sprayed around seedlings or applied to the planting strip. Pre-emergent herbicides are most effective if applied to the planting strips. The seedlings should be protected during herbicide application. Herbicides should not be applied on windy days when drift can damage surrounding seedlings.

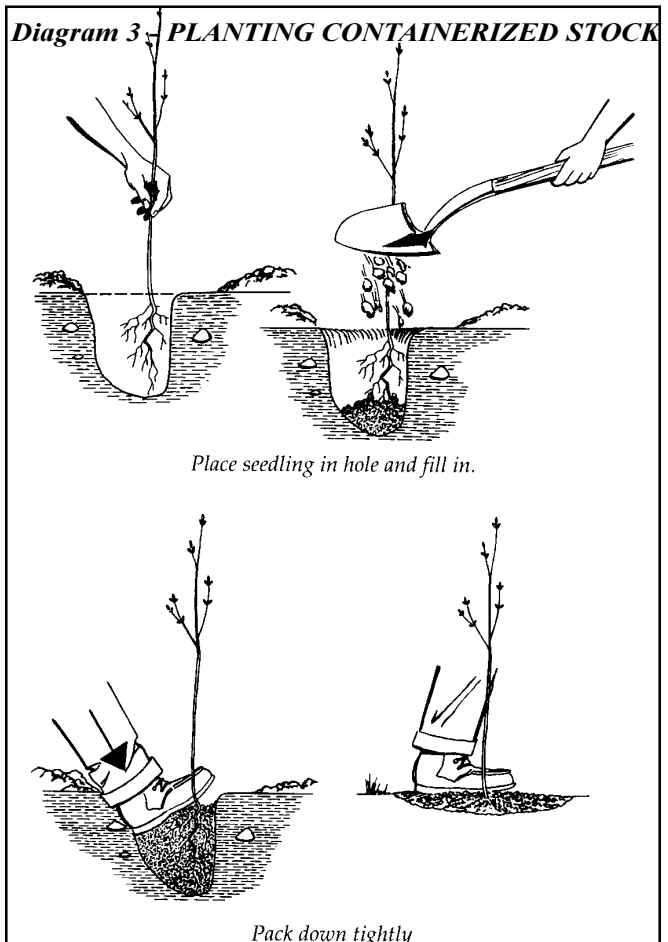
The seedlings can be protected from deer, recreational traffic or livestock by Fencing (Conservation Practice Standard 382), Use Exclusion (Conservation Practice Standard 472), or Tree Shelters.

SECOND YEAR

Continue to control weeds as needed throughout the year by mowing or treating with an herbicide. Always protect the seedlings during herbicide application and mowing.

THIRD YEAR

The seedlings should be well established by this time. Mow or use herbicides as needed to control competition. For optimum wildlife habitat, do not mow during the primary nesting season (April 15 to August 15). Control noxious weeds as required by State Law.



NOTES

PLANTING PLAN for TREES & SHRUBS		
For: _____	Primary Purpose:	
Tract Number: _____	<input type="checkbox"/> Erosion Control	Soil Loss B/A: _____
Recommended Planting Date: _____	<input type="checkbox"/> Water Quality	
Assisted By: _____	<input type="checkbox"/> Wildlife Habitat	Targeted Species: _____

[illegible]

COMPANION PLANTING	Field	Acres	Mixture	lb/ac
			Creeping Red Fescue or Chewings Fescue	3 - 6
			Hard Fescue	3 - 6
			Sheep Fescue	3 - 6
			Common White Clover	1 - 2

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.